

MOROZ=3 (COHN).ST25.txt SEQUENCE LISTING

, , , , , , , , , , , , , , , , , , , ,
<120> DNA SEQUENCE ENCODING ONCOFETAL FERRITIN PROTEIN
<130> MOROZ=3
<140> US 09/786,867 <141> 2001-03-12
<150> PCT/IL99/00485 <151> 1998-09-11
<160> 36
<170> PatentIn version 3.3
<210> 1 <211> 891 <212> DNA <213> Homo sapiens
<400> 1 ttgacaccag accaactggt aatggtagcg accggcgctc agctggaatt ccaaaaaatg 60
taatgcacac tccattgcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt 120
ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga 180
tcaacctgga gctctacgcc tcctacgttt acctgtccat gtcttactac tttgaccgcg 240
atgatgtggc tttgaagaac tttgccaaat actttcttca ccaatctcat gaggagaggg 300
aacatgctga gaaactgatg aagctgcaga accaacgagg tggccgaatc ttccttcagg 360
atatcaagaa accagactgt gatgactggg agagcgggct gaatgcaatg gagtgtgcat 420
tacatttgga aaaaaatgtg aatcagtcac tactggaatt cccttctcct atctccca 480
gtcctagctg ctggcatcac tatactacta acagaccgca acctcaacac caccttcttc 540
gaccccgccg gaggaagaga ccccattcta taccaacacc tattctgatt tttcggtcac 600
cctgaagttt atattcttat cctaccaggc ttcggaataa tctcccatat tgtaacttac 660
tactccggaa atcgctgtcg cctaaccgct aacattactg caggccacct actcatgcac 720
ctaattggaa gcgccaccct agcaatatca accattaacc ttccctctac acttatcatc 780
ttcacaattc taattctact gactatccta gaaatcgctg tcgccttaat ccaagcctac 840
gttttcacac ttctagtaag cctctacctg cacgacaaca cataaaaaaa a 891
<210> 2 <211> 885 <212> DNA <213> Homo sapiens
<400> 2 gggggacgga acccggcgct cgttccccac cccggccggc cgcccatagc cagccctccg 60
tcacctcttc accgcaccct cggactgccc caaggccccc gccgccgctc cagcgccgcg 120
cagccaccgc cgccgccgcc gcctctcctt agtcgccgcc atgacgaccg cgtccacctc 180
gcaggtgcgc cagaactacc accaggactc agaggccgcc atcaaccgcc agatcaacct 240 Page 1

MOROZ=3 (COHN).ST25.txt

tgagaaactg atgaagctgc agaaccaacg aggtggccga atcttccttc aggatatcaa gaaaccagac tgtgatgact gggagagcgg gctgaatgca atggagtgtg cattacattt ggaaaaaaat gtgaatcagt cactactgga actgcacaaa ctggccactg acaaaaatga cccccatttg tgtgacttca ttgagacaca ttacctgaat gagcaggtga aagccatcaa agaattgggt gaccacgtga ccaacttgcg caagatggga gcgcccgaat ctggcttggc ggaatatctc tttgacaagc acaccctggg agacagtgat aatgaaagct aagcctcggg ctaatttccc atagccgtgg ggtgacttcc ctggtcacca aggcagtgca tgcatgcatg ttggggtttc ctttaccttt tctataagtt gtaccaaaac atccacttaa gttctttgat	360 420 480 540 560 720 780
gaaaccagac tgtgatgact gggagagcgg gctgaatgca atggagtgtg cattacattt ggaaaaaaat gtgaatcagt cactactgga actgcacaaa ctggccactg acaaaaatga cccccatttg tgtgacttca ttgagacaca ttacctgaat gagcaggtga aagccatcaa agaattgggt gaccacgtga ccaacttgcg caagatggga gcgcccgaat ctggcttggc ggaatatctc tttgacaagc acaccctggg agacagtgat aatgaaagct aagcctcggg ctaatttccc atagccgtgg ggtgacttcc ctggtcacca aggcagtgca tgcatgcatg ttggggtttc ctttaccttt tctataagtt gtaccaaaac atccacttaa gttctttgat	480 540 560 560 720 780
ggaaaaaat gtgaatcagt cactactgga actgcacaaa ctggccactg acaaaaatga cccccatttg tgtgacttca ttgagacaca ttacctgaat gagcaggtga aagccatcaa agaattgggt gaccacgtga ccaacttgcg caagatggga gcgcccgaat ctggcttggc ggaatatctc tttgacaagc acaccctggg agacagtgat aatgaaagct aagcctcggg ctaatttccc atagccgtgg ggtgacttcc ctggtcacca aggcagtgca tgcatgcatg ttggggtttc ctttaccttt tctataagtt gtaccaaaac atccacttaa gttctttgat	540 500 560 720 780
cccccatttg tgtgacttca ttgagacaca ttacctgaat gagcaggtga aagccatcaa agaattgggt gaccacgtga ccaacttgcg caagatggga gcgcccgaat ctggcttggc ggaatatctc tttgacaagc acaccctggg agacagtgat aatgaaagct aagcctcggg ctaatttccc atagccgtgg ggtgacttcc ctggtcacca aggcagtgca tgcatgcatg ttggggtttc ctttaccttt tctataagtt gtaccaaaac atccacttaa gttctttgat	500 560 720 780
agaattgggt gaccacgtga ccaacttgcg caagatggga gcgcccgaat ctggcttggc ggaatatctc tttgacaagc acaccctggg agacagtgat aatgaaagct aagcctcggg ctaatttccc atagccgtgg ggtgacttcc ctggtcacca aggcagtgca tgcatgcatg ttggggtttc ctttaccttt tctataagtt gtaccaaaac atccacttaa gttctttgat	560 720 780
ggaatatctc tttgacaagc acaccctggg agacagtgat aatgaaagct aagcctcggg ctaatttccc atagccgtgg ggtgacttcc ctggtcacca aggcagtgca tgcatgcatg ttggggtttc ctttaccttt tctataagtt gtaccaaaac atccacttaa gttctttgat	720 780
ctaatttccc atagccgtgg ggtgacttcc ctggtcacca aggcagtgca tgcatgcatg ttggggtttc ctttaccttt tctataagtt gtaccaaaac atccacttaa gttctttgat	780
ttggggtttc ctttaccttt tctataagtt gtaccaaaac atccacttaa gttctttgat	
	340
ttgtaccatt ccttcaaata aagaaatttg gtacccaaaa aaaaa	
	885
<210> 3 <211> 209 <212> DNA <213> Homo sapiens	
<400> 3 cttctcctat ctctcccagt cctagctgct ggcatcacta tactactaac agaccgcaac	60
ctcaacacca ccttcttcga ccccgccgga ggaggagacc ccattctata ccaacaccta	120
ttctgatttt tcggtcaccc tgaagtttat attcttatcc taccaggctt cggaataatc	180
tcccatattg taacttacta ctccggaaa	209
<210> 4 <211> 891 <212> DNA <213> Homo sapiens	
<400> 4 ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt	60
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt	60 120
atgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt	
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt aatgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga	120
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt aatgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga tcaacctgga gctctacgcc tcctacgttt acctgtccat gtcttactac tttgaccgcg	120 180
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt aatgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga tcaacctgga gctctacgcc tcctacgttt acctgtccat gtcttactac tttgaccgcg atgatgtggc tttgaagaac tttgccaaat actttcttca ccaatctcat gaggagaggg	120 180 240
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt aatgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga tcaacctgga gctctacgcc tcctacgtt acctgtccat gtcttactac tttgaccgcg atgatgtggc tttgaagaac tttgccaaat actttcttca ccaatctcat gaggagaggg aacatgctga gaaactgatg aagctgcaga accaacgagg tggccgaatc ttccttcagg	120 180 240 300
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt aatgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga tcaacctgga gctctacgcc tcctacgttt acctgtccat gtcttactac tttgaccgcg atgatgtggc tttgaagaac tttgccaaat actttcttca ccaatctcat gaggagaggg aacatgctga gaaactgatg aagctgcaga accaacgagg tggccgaatc ttccttcagg atatcaagaa accagactgt gatgactggg agagcggct gaatgcaatg gagtgtgcat	120 180 240 300 360
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt aatgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga tcaacctgga gctctacgcc tcctacgttt acctgtccat gtcttactac tttgaccgcg atgatgtggc tttgaagaac tttgccaaat actttctca ccaatctcat gaggagaggg aacatgctga gaaactgatg aagctgcaga accaacgagg tggccgaatc ttccttcagg atatcaagaa accagactgt gatgactggg agagcgggct gaatgcaatg gagtgtgcat tacatttgga aaaaaatgtg aatcagtcac tactggaatt cccttctct atctccca	120 180 240 300 360 420
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt aatgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga tcaacctgga gctctacgcc tcctacgttt acctgtccat gtcttactac tttgaccgcg atgatgtggc tttgaagaac tttgccaaat actttcttca ccaatctcat gaggagaggg aacatgctga gaaactgatg aagctgcaga accaacgagg tggccgaatc ttccttcagg atatcaagaa accagactgt gatgactggg agagcgggct gaatgcaatg gagtgtgcat tacatttgga aaaaaatgtg aatcagtcac tactggaatt cccttctcct atctccca gtcctagctg ctggcatcac tatactacta acagaccgca acctcaacac caccttcttc	120 180 240 300 360 420
ttgacaccag accaactggt aatggtagcg accggcgctc agctgggatt cctaaaatgt aatgcacact ccattggcat tcagcccgcc tctccttagt cgccgccatg acgaccgcgt ccacctcgca ggtgcgccag aactaccacc aggactcaga ggccgccatc aaccgccaga tcaacctgga gctctacgcc tcctacgttt acctgtccat gtcttactac tttgaccgcg atgatgtggc tttgaagaac tttgccaaat actttcttca ccaatctcat gaggagaggg aacatgctga gaaactgatg aagctgcaga accaacgagg tggccgaatc ttccttcagg atatcaagaa accagactgt gatgactggg agagcgggct gaatgcaatg gagtgtgcat tacatttgga aaaaaatgtg aatcagtcac tactggaatt cccttccct atctccca gtcctagctg ctggcatcac tatactacta acagaccgca acctcaacac caccttcttc gaccccgccg gaggaagaga ccccattcta taccaacacc tattctgatt tttcggtcac	120 180 240 300 360 420 480

MOROZ=3 (COHN).ST25.txt

ctaattggaa	gcgccaccct	agcaatatca	accattaacc	ttccctctac	acttatcatc	780
ttcacaattc	taattctact	gactatccta	gaaatcgctg	tcgccttaat	ccaagcctac	840
gttttcacac	ttctagtaag	cctctacctg	cacgacaaca	cataaaaaaa	a	891

<210> 5 <211> 165

<211> 165 <212> PRT

<213> Homo sapiens

<400> 5

Met Thr Thr Ala Ser Thr Ser Gln Val Arg Gln Asn Tyr His Gln Asp 10 15

Ser Glu Ala Ala Ile Asn Arg Gln Ile Asn Leu Glu Leu Tyr Ala Ser 20 25 30

Tyr Val Tyr Leu Ser Met Ser Tyr Tyr Phe Asp Arg Asp Val Ala 35 40 45

Leu Lys Asn Phe Ala Lys Tyr Phe Leu His Gln Ser His Glu Glu Arg 50 55 60

Gln His Ala Glu Lys Leu Met Lys Leu Gln Asn Gln Arg Gly Gly Arg 65 70 75 80

Ile Phe Leu Gln Asp Ile Lys Lys Pro Asp Cys Asp Asp Trp Glu Ser 85 90 95

Gly Leu Asn Ala Met Glu Cys Ala Leu His Leu Glu Lys Asn Val Asn 100 105 110

Gln Ser Leu Leu Glu Phe Pro Ser Pro Ile Ser Pro Ser Pro Ser Cys 115 120 125

Trp His His Tyr Thr Asn Arg Pro Gln Pro Gln His His Leu Leu 130 135 140

Arg Pro Arg Arg Lys Arg Pro His Ser Ile Pro Thr Pro Ile Leu 145 150 155 160

Ile Phe Arg Ser Pro 165

<210> 6

<211> 24 <212> DNA

<213> Homo sapiens

<400> 6

ggtggcgacg actcctggag cccg

24

MOROZ=3 (COHN).ST25.txt <210> <211> 24 <212> DNA <213> Homo sapiens <400> 7 ttgacaccag accaactggt aatg 24 <210> 27 <211> <212> DNA <213> Homo sapiens <400> 8 gaccgcgatg atgtggcttt gaagaac 27 <210> <211> 24 <212> DNA <213> Homo sapiens <400> 9 gataggatct ttagcgacag ccga 24 <210> 10 <211> 24 <212> DNA <213> Homo sapiens <400> 10 atggcggcct ctgagtcctg gtgg 24 <210> 11 <211> 24 <212> DNA <213> Homo sapiens <400> 11 cgggctgaat gcaatggagt gtgc , 24 <210> 12 <211> 18 <212> DNA <213> Homo sapiens <400> 12 gacccccatt tgtgtgac 18 <210> 13 <211> 19 <212> DNA <213> Homo sapiens <400> 13 cgacgactcc tggagcccg 19 <210> 14 <211> 24 <212> DNA

<213> Homo sapiens

•		MOROZ=3 (COHN).ST25.txt	•
<400> ttgaca	14 ccag accaactcgt	aatg	24
<210> <211> <212> <213>	15 24 DNA Homo sapiens		
<400> agccga	15 cagc gatttctagg	atag	24
<210> <211> <212> <213>	16 27 DNA Homo sapiens		
<400> gttctt	16 caaa gccacatcat	cgcggtc	27
<210> <211> <212> <213>	17 28 DNA Homo sapiens		
<400> gctttc	17 atta tcactgtctc	ccagggtg	28
<210> <211> <212> <213>	18 24 DNA Homo sapiens		
<400> cagacg	18 ttct tcgccgagag	tcgt	24
<210> <211> <212> <213>	19 27 DNA Homo sapiens		
<400> cagacg	19 ttct tcgccgagag	tcgtcgg	27
<210> <211> <212> <213>	20 20 DNA Homo sapiens		
<400> catttc	20 gggg attcggggga		20
<210> <211> <212> <213>			
<400> ggggga	21 cgga acccggcgct		20
<210>	22		

MOROZ=3 (COHN).ST25.txt <211> 21 <212> DNA <213> Homo sapiens <400> 22 ccctctacac ttatcatctt c 21 23 24 <210> <211> <212> DNA <213> Homo sapiens <400> 23 ctatcctaga aatcgctgtc ggct 24 <210> 24 <211> 24 <212> DNA <213> Homo sapiens <400> 24 gtcactactg gaattccctt ctcc 24 25 <210> <211> <212> 24 DNA <213> Homo sapiens <400> 25 ggagaaggga attccagtag tgac 24 <210> 26 <211> 21 <212> DNA <213> Homo sapiens <400> 26 ggaaatcgct gtcgcctaac c 21 <210> 27 <211> 21 <212> DNA <213> Homo sapiens <400> 27 ggttaggcga cagcgatttc c 21 <210> 28 <211> 20 <212> DNA <213> Homo sapiens <400> 28 ggccacgcgt cgactagtac 20 <210> 29 <211> 20 <212> DNA <213> Homo sapiens <400> 29

162 PL 3.

gtaatgo	caca ctccattggc	MOROZ=3	(COHN).ST25.txt	20
<210> <211> <212> <213>	30 18 DNA Homo sapiens		·	
<400> gtaatgo	30 caca ctccattg			18
<210> <211> <212> <213>	31 18 DNA Homo sapiens			
<400> gcgctca	31 agct ggaattcc			18
<210> <211> <212> <213>	32 18 DNA Homo sapiens			
<400> ggaatte	32 ccag ctgagcgc			18
<210> <211> <212> <213>	33 29 DNA Homo sapiens			
<400> gtggga	33 tccc catgacgacc	gcgtccacc		29
<210> <211> <212> <213>	34 27 DNA Homo sapiens			
<400> gactcg	34 agtt aagccgacag	cgatttc		27
<210> <211> <212> <213>	35 29 DNA Homo sapiens			
<400> gactcg	35 agtc agggtgaccg	aaaaatcag		29
<210> <211> <212> <213>	36 31 DNA Homo sapiens			
<400> cccgct	36 cgag tcagggtgac	cgaaaaatca g		31